



# NOTES:

1. HIGH QUALITY FULLY ANNEALED SEAMLESS TYPE 316, AUSTENITIC STAINLESS STEEL HYDRAULIC TUBING ASTM A212, A269 OR EQUIVALENT HARDNESS Rb 80 OR LESS. TUBING TO BE FREE OF SCRATCHES, O.D. TOLERANCE NOT TO EXCEED -0.03
2. USE PROPER TUBE BENDER TO BEND THE TUBE. KEEP THE TUBE ENDS STRAIGHT AND PROPER ROUNDNESS WITHOUT SCRATCHES.
3. BOTH I.D. AND O.D. OF TUBE SHOULD BE DEBURRED AFTER CUTTING
4. DIMENSIONS WITH [ ] ARE MILLIMETERS AND FOR REF. ONLY

1	REDESIGNED	M.J.M.	D.S.	10/00
SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
REVISIONS				

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
PARTS LIST				
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		THIS DRAWING IS THE PROPERTY OF <b>ARGONNE NATIONAL LABORATORY</b>		
TOLERANCES DECIMALS .X - .1 [2.5] .XX - .01 [0.25] .XXX - .005 [0.13] SURFACE ROUGHNESS 125 REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX. SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1 DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5		LOG NUMBER <b>L5920003-01</b>	ADVANCED PHOTON SOURCE L5-92 APS UNDULATOR WHITE BEAM H & V GRAZING - INCIDENCE MOVEABLE MASK 2 ND COOLING TUBE	
DRAWN BY <b>MUSCIA</b>	DATE <b>7/14/97</b>	CHIEF DESIGN ENGINEER <b>D. SHU</b>	DATE <b>7/25/97</b>	
CHECKED BY <b>J. CHANG</b>	DATE <b>7/25/97</b>	GP LEADER <b>T.M. KUZAY</b>	DATE <b>7/25/97</b>	
DESIGNER <b>SHU/MUSCIA</b>	DATE <b>7/14/97</b>	PROJECT MGR.	DATE	
RESPONSIBLE ENGINEER <b>D. SHU</b>	DATE <b>7/25/97</b>	APPROVED/RELEASED	DATE	
MATERIAL <b>316 STAINLESS STEEL TUBING .375 O.D. X .035 THK. WALL</b>		SCALE <b>1:1</b>	SIZE <b>B</b>	DRAWING NUMBER <b>L5-920003-01</b>
DO NOT SCALE DRAWING		SHEET <b>14</b>		